<u>**Amendments to the Claims:**</u>

This listing of claims will replace, without prejudice, all prior versions, and listings, of claims in the application:

<u>**Listing of Claims:**</u>

1. (Currently Amended) A method for calibrating at least one image sensor system which is located at a motor vehicle, by the use of at least one calibrating object, the method comprising:

generating, using the at least one image sensor system, image data of the at least one calibrating object;

determining, from generated image data of the at least one calibrating object, an alignment of the at least one image sensor system with respect to a geometric travel axis of the motor vehicle<u>, the geometric travel axis being a bisector of a total toe-in angle of a rear axis of the vehicle</u>; and

determining a calibration using a determined alignment of the at least one image sensor system with respect to the geometric travel axis of the motor vehicle.

2. (Original) The method of claim 1, wherein the data on the geometric travel axis of the motor vehicle included in the generated image data are used.

3. (Currently Amended) <u>A</u> ~~The~~ method <u>for calibrating at least one image sensor system which is located at a motor vehicle, by the use of at least one calibrating object</u> ~~of claim 1~~, <u>the method comprising:</u>

<u>generating, using the at least one image sensor system, image data of the at least one calibrating object;</u>

<u>determining, from generated image data of the at least one calibrating object, an alignment of the at least one image sensor system with respect to a geometric travel axis of the motor vehicle; and</u>

<u>determining a calibration using a determined alignment of the at least one image sensor system with respect to the geometric travel axis of the motor vehicle;</u>

wherein:

in the determining of the alignment, at least one pointer is aligned at at least one non-steered wheel of the motor vehicle by the at least one pointer,

at least one marking point is generated on the at least one calibrating object, and

data on the geometric travel axis of the motor vehicle is derivable from the at least one marking point.

4. (Original) The method of claim 3, wherein:

a first and a second pointer, each having a pointer beam on a first and a second non-steered wheel of the motor vehicle, are aligned,

the first and the second non-steered wheel approximately establish a wheel axis so that the pointer beam of the first pointer is aligned approximately parallel to the roadway plane and approximately parallel to the track of the first non-steered wheel, and the pointer beam of the second pointer is aligned approximately parallel to the roadway plane and approximately parallel to the track of the second non-steered wheel, the pointer beams being suitable in each case for generating a marking point on the at least one calibrating object,

the alignment of the calibrating object to the motor vehicle is such that an angle between the geometric travel axis and the calibrating object is between 0^0 and 180^0,

for the generation of the image data of the at least one calibrating object by the at least one image sensor system, image data of the marking points is included, and

the determining of the alignment of the at least one image sensor system with respect to the geometric travel axis of the motor vehicle is performed with the aid of the generated image data.

5. (Original) The method of claim 4, wherein:

the calibration includes determining at least one distance between the at least one calibrating object and at least one of the first and second non-steered wheel along at least one of the first and second pointer beam of at least one of the first and second pointer, and

the determining of the alignment of the at least one image sensor system with respect to the geometric travel axis of the motor vehicle is performed with the aid of the generated image data and at least one determined distance.

6. (Original) The method of claim 4, wherein in the alignment of the calibrating object to the motor vehicle, the angle between the geometric travel axis and the calibrating object is perpendicular.

7. (Original) The method of claim 3, wherein:

the alignment of a first and a second pointer on a first and a second non-steered wheel of the motor vehicle,

the first and the second pointer each having a first and a second pointer beam,

the first and the second non-steered wheel approximately establishing a wheel axis so that the first pointer beam of the first pointer is aligned approximately parallel to the roadway plane and approximately parallel to the track of the first non-steered wheel, and the first pointer beam of the second pointer is aligned approximately parallel to the roadway plane and approximately parallel to the track of the second non-steered wheel,

the second pointer beams in each case are positioned at an angle different from zero to the first pointer beam of the same pointer,

the second pointer beams in each case are aligned approximately parallel to the track of the non-steered wheel,

all four pointer beams are suitable in each case for generating one marking point on the at least one calibrating object,

the calibrating includes determining a distance between the calibrating object and at least one of the non-steered wheels along the first and the second pointer beams of the first and the second pointer,

in the generating of the image data of the at least one calibrating object by the at least one image sensor system, image data of the marking points is included, and

the determining of the alignment of the at least one image sensor system with respect to the geometric travel axis of the motor vehicle is performed with the aid of the generated image data and at least one determined distance.

8. (Original) The method of claim 1, wherein there are at least two image sensor systems which image essentially the same scene, and the alignment of each of the image sensor systems with respect to the geometric travel axis of the motor vehicle is determined separately for each of the image sensor systems, from which the alignment of the image sensor systems to each other is determined.

9. (Original) The method of claim 1, wherein at least one value of intrinsic calibration data of the at least one image sensor system is determined.

10. (Currently Amended) A device for calibrating at least one image sensor system which is located at a motor vehicle, by the use of at least one calibrating object, the device comprising:

at least one calibrating object; and

at least one evaluation arrangement to evaluate image data of the at least one image sensor system, which generates the image data of the at least one calibrating object, and which includes a determining arrangement to determine, from generated image data of the at least one calibrating object, an alignment of the at least one image sensor system with respect to a geometric travel axis of the motor vehicle, the geometric travel axis being a bisector of a total toe-in angle of a rear axis of the vehicle;

wherein a calibration is determined using a determined alignment of the at least one image sensor system with respect to the geometric travel axis of the motor vehicle.

11. (Original) The device of claim 10, wherein the evaluation arrangement includes an arrangement to evaluate data concerning the geometric travel axis of the motor vehicle included in the image data.

12. (Currently Amended) A The device for calibrating at least one image sensor system which is located at a motor vehicle, by the use of at least one calibrating object of claim 10, the device comprising:

at least one calibrating object; and

at least one evaluation arrangement to evaluate image data of the at least one image sensor system, which generates the image data of the at least one calibrating object, and which includes a determining arrangement to determine, from generated image data of the at least one calibrating object, an alignment of the at least one image sensor system with respect to a geometric travel axis of the motor vehicle;

wherein a calibration is determined using a determined alignment of the at least one image sensor system with respect to the geometric travel axis of the motor vehicle; and

wherein at least one pointer is aligned on at least one non-steered wheel of the motor vehicle, and at least one pointer beam of the at least one pointer generates at least one marking point on the at least one calibrating object.

13. (Original) The device of claim 12, wherein the at least one pointer includes a range finder.

14. (Original) The device of claim 10, wherein the at least one image sensor system includes at least two image sensor systems which image essentially the same scene.

15. (Currently Amended) An image sensor system including a device for calibrating at least one image sensor system which is located at a motor vehicle, by the use of at least one calibrating object, the image sensor system comprising:

at least one calibrating object; and

at least one evaluation arrangement to evaluate image data of the at least one image sensor system, which generates the image data of the at least one calibrating object, and which includes a determining arrangement to determine, from generated image data of the at least one calibrating object, an alignment of the at least one image sensor system with respect to a geometric travel axis of the motor vehicle, the geometric travel axis being a bisector of a total toe-in angle of a rear axis of the vehicle;

wherein a calibration is determined using a determined alignment of the at least one image sensor system with respect to the geometric travel axis of the motor vehicle.

16. (Original) The method of claim 1, wherein the generating, using the at least one image sensor system, of the image data of the at least one calibrating object, is in at least one image data set.

17. (Original) The method of claim 4, wherein the calibrating object has a flat surface.

18. (Original) The method of claim 4, wherein the geometric axis of the vehicle includes at least one of a yaw angle, a pitch angle, and a roll angle.

19. (Original) The method of claim 5, wherein in the alignment of the calibrating object to the motor vehicle, the angle between the geometric travel axis and the calibrating object is perpendicular.

20. (Original) The method of claim 5, wherein the geometric axis of the vehicle includes at least one of a yaw angle, a pitch angle, and a roll angle.

21. (Original) The method of claim 7, wherein the geometric axis of the vehicle includes at least one of a yaw angle, a pitch angle, and a roll angle.

22. (Original) The method of claim 8, wherein the at least two image systems includes at least a stereo camera system.

23. (Currently Amended) A ~~The~~ method for calibrating at least one image sensor system which is located at a motor vehicle, by the use of at least one calibrating object ~~of claim 22~~, the method comprising:

    generating, using the at least one image sensor system, image data of the at least one calibrating object;

    determining, from generated image data of the at least one calibrating object, an alignment of the at least one image sensor system with respect to a geometric travel axis of the motor vehicle; and

    determining a calibration using a determined alignment of the at least one image sensor system with respect to the geometric travel axis of the motor vehicle;

    wherein there are at least two image sensor systems which image essentially the same scene, and the alignment of each of the image sensor systems with respect to the geometric travel axis of the motor vehicle is determined separately for each of the image sensor systems, from which the alignment of the image sensor systems to each other is determined;

    wherein the at least two image sensor systems include at least a stereo camera system; and

    wherein the intrinsic calibration data includes at least one of the camera's principal point, the camera's principal distance, at least one distortion parameter, and an influence of a glass pane in a light path of the camera.

24. (Currently Amended) A ~~The~~ method for calibrating at least one image sensor system which is located at a motor vehicle, by the use of at least one calibrating object ~~of claim 22~~, the method comprising:

    generating, using the at least one image sensor system, image data of the at least one calibrating object;

    determining, from generated image data of the at least one calibrating object, an alignment of the at least one image sensor system with respect to a geometric travel axis of the motor vehicle; and

    determining a calibration using a determined alignment of the at least one image sensor system with respect to the geometric travel axis of the motor vehicle;

    wherein there are at least two image sensor systems which image essentially the same

scene, and the alignment of each of the image sensor systems with respect to the geometric travel axis of the motor vehicle is determined separately for each of the image sensor systems, from which the alignment of the image sensor systems to each other is determined;

wherein the at least two image sensor systems include at least a stereo camera system; and

wherein the intrinsic calibration data includes at least one of a principal point, a principal distance, at least one distortion parameter, and an influence of a glass pane in a light path of at least one of the at least two image sensor systems.

25. (Original) The device of claim 12, wherein the at least one pointer includes an electronic range finder.

26. (Original) The device of claim 12, wherein the at least one pointer includes an optical range finder.

27. (Original) The device of claim 12, wherein the at least one pointer includes an electronic/optical range finder.

28. (Currently Amended) The device of claim 14, wherein the at least two image sensor systems ~~includes~~ include at least one stereo camera system.